

inch. Moreover, Kobelt's designation in 1878 of *C. barbata* as the type of *Japonia*, which was then considered by him as a subgenus of *Realia*, does not add any more detail to the original description of that species and genus. So that by insufficient knowledge of the species, as already pointed out by Moellendorff, and lack of original material to prove their definite identification, *Japonia* remains a doubtful group. There is no reason to include the definitely known species of *Lagochilus* in such an indefinite group as *Japonia*.

On the other hand, the available material of *C. musiva* does not show its congeneric features with *L. scissimargo*, while such Chinese species as *Lagochilus glabratus* Moellendorff, *L. clathratus* (Heude), *L. hungerfordianus* (Moellendorff), *L. longipilus* (Moellendorff), *L. pellicostus* (Moellendorff), *L. pilosus* Moellendorff, *L. sexfilaris* (Heude), *L. tenuipilus* Gredler, *L. trichophorus* Moellendorff, etc., do show close resemblance to the genotype. In changing these species, and others as well, from *Lagochilus* to *Japonia*, Kobelt did not restudy the authentic material of *Japonia* to fix its exact position before he drastically included from different groups more than one hundred species and varieties under the general heading of *Japonia*, and no fewer than 20 species, mostly from *Lagochilus*, in its restricted sense. It is evident that such changes were merely because of observing the law of priority that *Japonia* precedes *Lagochilus*, but not on comparison of the morphological features of authentic material of both groups, from which their systematic positions can be better ascertained.

NOTES ON FLORIDA MOLLUSCA, WITH DESCRIPTIONS OF TWO NEW VARIETIES

By TED BAYER

During the past few years several new records for the United States, as well as two new varieties of marine mollusks, have been brought to my attention, and I take this opportunity to present them to students and collectors at large.

CONUS ECHINULATUS Kiener. Some time ago a peculiar *Conus* turned up from Hillsborough Inlet, which could not be assigned to any familiar local species. Finally some specimens were sent

to Mr. Hugh Fulton of London, and he kindly identified them for me. His letter of August 28, 1940, reads, in part: "The box with the little cones arrived today. They are *Conus cehinulatus* Kiener, which Tryon put as a variety of *verrucosus* Hwass. Its granulation separates it from *verrucosus* but there are possibly intermediates that link them together." We have not seen such intermediates; on the contrary, the shells on hand are very constant in character of sculpture. There is wide variation in color, however. The shells range from straw color and brown to rosy and lavender, with darker mottling. The animal is white or cream colored.

PYRENE MERCATORIA Linnaeus. During the first few days of January, and again in August, 1941, the author collected specimens of *Pyrene mercatoria* on Garden Key, Dry Tortugas, that far surpass any other Florida specimens in size. These very large shells were found in the same areas that were frequented by typical *mercatoria*. The largest typical *mercatoria* collected was 15 mm. in length, and the largest of the large form was 21 mm. The large form is rather consistent in size, averaging 19.3 mm., while typical *mercatoria* range between 11 mm. and 15 mm., with an average of 13.6 mm. In addition to larger size, this shell has finer spiral sculpture, bearing from 19 to 22 spiral costae, against 10 to 12 for typical *mercatoria*. In color the large form runs from yellow and brown mottled to almost solid black, with only a few streaks of pure white. The typical *mercatoria* ranges between brown mottled and pure white. Opinion is withheld until further studies and observations are made on both shells.

CYPRAEA EXANTHEMA Linn. and *C. EXANTHEMA CERVUS* Linnaeus. While collecting at the Tortugas in January and again in August, some remarkable specimens of these two shells were found. All were very much smaller than normal, though otherwise quite mature. The largest *C. exanthema* was 50 mm. long, and the smallest only 39. The largest *C. exanthema cervus* was 62 mm. and the smallest only 50. These specimens came from Garden Key, where Dr. B. R. Bales also reported finding them in the early spring. In all, six specimens were collected, three of the *exanthema* and three of the variety. The reason (or reasons) for this dwarfing of *Cypraea* is not apparent. Other

species of marine life tend to grow larger than normal in this region of pure water and abundant food.

MITRA FLORIDA Gould. Plate 3, figure 18. During the past half year, two good specimens of this fine Florida shell have come to light, one from the Dry Tortugas, the other from the lower Florida Keys. The specimen of this species from the Dry Tortugas was collected by the author on Loggerhead Key, January 3, 1941. The other specimen was obtained by A. H. Patterson, with exact locality not given. The latter example was found still containing the animal, and is no doubt the best and largest specimen as yet brought to our attention. Although this species has been known for many years, it remains missing from most Florida check-lists, and should certainly be added.

NATICA SULCATA Born. During March of 1939, two living examples of this shell were found on the sand-bar at Peanut Island in the Palm Beach Inlet, by the present author. In the fall of the same year another living example was found at approximately the same place, but in a grassy station. Early in the following year a living specimen was dredged west of Peanut Island in the Intracoastal Waterway channel by Captain and Mrs. E. S. Vail. Then, during the subsequent summer, specimens were collected by Mr. and Mrs. Donovan, as reported in the *NAUTILUS* 54: 2, page 71.

CYPHOMA MCGINTYI ROBUSTIOR nov. var. Plate 3, figures 10-15.

During 1939 some very peculiar specimens of *Cyphoma* were obtained, which were collected by Greek sponge divers in the northern part of the Gulf of Mexico, probably in Apalachee Bay. The affinity of this mollusk definitely lies with *C. mcgintyi* Pillsbry (*NAUTILUS*, 53: 1, page 2) as the animal remaining in one specimen clearly indicates. The mantle pattern consists of solid brown spots on a white background.

Shell similar to *C. mcgintyi*; broad, thick and heavy. The transverse dorsal ridge is high and very prominent; the callus is thick and very strong on the right, sharply defined; callus more diffused on the left, though moderately thick; callus at the apex of the spire elevated dorsally into a little knob. Color, white, with a diffuse light fawn or lavender tint on the back; callus and dorsal ridge snow white. Length of holotype 39 mm., width 19.5 mm.

Holotype as yet in the author's collection, cat. 3003, paratypes in the author's collection, and the collection of Mr. and Mrs. J. W. Donovan.

PECTEN (CHLAMYS) IMBRICATUS MILDREDAE, nov. var. Pl. 3, figs. 16, 17.

Left valve rayed with eight rather prominent ribs and from 1 to 3 interstitial smaller ribs between each major rib. Large and small costae armed with elevated scales placed at regular intervals. Lower valve rayed with rather prominent scaly ribs in groups which correspond to the major ribs on the upper valve. Auricles unequal, with seven teeth in the byssal aperture. Color, ranging from a brilliant red flecked with white, through brownish-purple mottled with paler tan, to pure white. Holotype pale brown, purple tinted at the margin, with spots of darker brown between the major costae. Lower valve pale tan or fawn, with faint suggestion of spotting. Interior yellow with clear purple at the margins and at the hinge. Alt. 37.5 mm.; lat. 32 mm.

Several factors link this shell with *imbricatus*: one is the similar scheme of ribbing; the enlarged, sometimes cupped scales; the yellow and purple interior; and the large size of individuals. Unfortunately, the type material selected by Frampton is not available. The shell ranges from Biscayne Bay to the Tortugas and the Bahamas. Holotype cat. 02948 in the author's cabinet; paratypes in collection of W. A. Royce. Named in honor of Mrs. W. A. Royce, who first collected it.

NOTES ON EPITONIUM (NITIDOSCALA) TINCTUM (CARPENTER)

BY A. M. STRONG

In a paper, Notes on Some Species of Epitonium (Trans. San Diego Soc. Nat. Hist., vol. 6, No. 7, 1930), I have shown that *Scalaria tinctoria* Carpenter, described from Cedros Island (Cerro Island, Lower California) and San Pedro, *Scalaria subcoronata* Carpenter, described from Monterey, and "*Scala hindsii* Carpenter" Arnold, described from the Pleistocene of San Pedro, are all three based on specimens representing a single species. Since writing this paper many additional specimens have come to hand. Among these it is found that there is a notable difference in the shells from north and south of Point Conception, California.